INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/23131

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/24; C12M 1/34
US CL : 435/30, 287.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/7.2, 7.32-7.37, 29, 30, 34, 287.1, 287.2, 287.9, 288.3, 288.7; 382/132,133; 250/459.1-461.2; 356/38, 244; 359/398

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,734,372 A (ROTMAN) 29 March 1988 (29.03.1988), see entire document, especially Figures 5 and 6.	1-30,73
X	US 3,844,895 A (ROSE et al.) 29 October 1974 (29.10.1974), see entire document.	1, 2, 9-14, 16, 17, 19, 73
X --- Y	EP 0 109 531 A1 (FREIBURGHAUS) 30 May 1984 (30.05.1984), see entire document, especially pages 5-6.	56-61, 64 --- 65-68, 70-72
Y	US 6,288,220 B1 (KAMBARA et al.) 11 September 2001 (11.09.2001), see entire document.	67, 68, 70-72
Y	US 3,970,429 A (UPDIKE) 20 July 1976 (20.07.1976), see entire document.	65-68, 70-72
X --- Y	US 2,923,669 A (POITRAS) 02 February 1960 (02.02.1960), see entire document.	1-17, 19-21, 73 --- 31-49
Y	US 5,863,957 A (LI et al.) 26 January 1999 (26.01.1999), see entire document.	62-64

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703)305-3230

Authorized officer
William H. Beisner
Telephone No. 703-308-0661

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INTERNATIONAL SEARCH REPORT

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,506,141 A (WEINREB et al.) 09 April 1996 (09.04.1996), see entire document.	1-49
A	US 5,608,519 A (GOURLEY et al.) 04 March 1997 (04.03.1997), see entire document.	1-55, 69
A	US 5,480,804 A (NIWA et al.) 02 January 1996 (02.01.1996), see entire document.	1-55, 69